ABSTRACT OF THE DISCLOSURE UNDER 37 C.F.R. §1.72(b)

A method and apparatus for reducing error propagation in digital video signals using random forced intra-refresh of macroblocks. One or more predetermined regions are defined for each digital video frame. Within each predetermined region, a number of macroblocks are selected according to a random permutation of the macroblocks within the region. The selected macroblocks are intra-coded, while the remaining macroblocks are coded according to a standard video compression protocol. This approach provides an efficient method for mitigating error propagation in a decoder. Interior regions may be smaller than exterior regions, providing higher quality for the interior regions, where sensitivity to errors is higher.